

*How to make good pictures with your*

# **POLAROID HIGHLANDER LAND CAMERA**



***Model 80B***

## PLEASE

**Do yourself a big favor** and spend a few minutes reading this booklet before you take your first picture.

Because the Polaroid Land Camera is the only camera in the world that takes and develops its own pictures, it is unlike any other camera you have ever owned. Thus we urge you to read these instructions carefully—not because the camera is difficult to use, but because it is *different*.

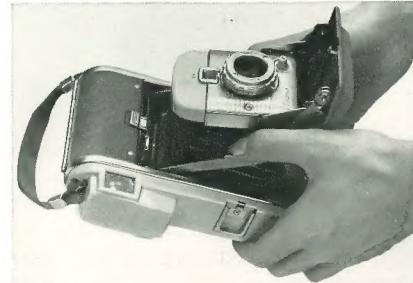
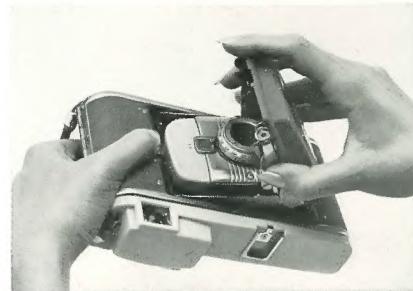
This brief instruction book (containing plenty of pictures) has been designed to acquaint you with the unique Polaroid Land Camera and to be kept as a handy guide to 60-second photography.

A few minutes now with this booklet, practicing the operation of the camera, will help you take perfect 60-second pictures on your first roll.

## KNOW THE CAMERA

Get acquainted with the camera without any film in it. First, try opening and closing the camera a few times.

**To Open:** Press on the cover catch.



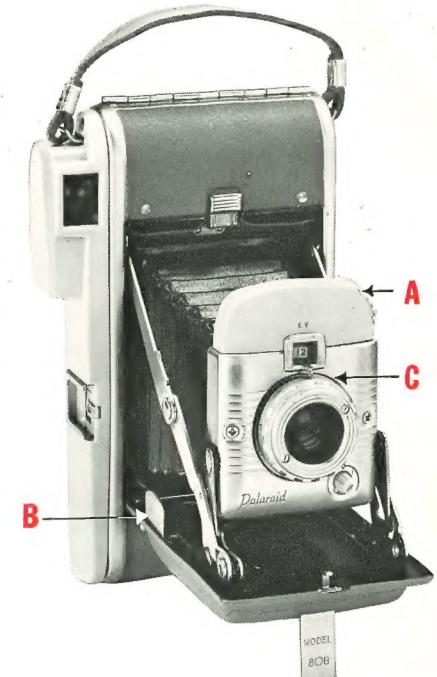
**To Close:** Press on the cover braces.

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## Setting for Exposure

Turn the dial on the shutter housing (A). Note that the numbers in the little EV window change from 11 through 18. (The letters "EV" stand for Exposure Value.)

Look into the camera lens and press the shutter release (B) at each EV setting. As you change from EV 11 to EV 12, the shutter speed stays the same (1/25th) while the lens opening becomes smaller. When you change to EV 13, the lens opening becomes larger again, but the shutter speed is now much faster (1/100th). For each setting thereafter, the speed stays the same while the lens opening becomes smaller.



## Focusing

Below the EV window is the focusing turret (C) which has numbers corresponding to the number of feet from the lens to the subject you are photographing. You focus the lens by turning the turret so that the correct distance mark is directly beneath the pointer.

## Holding the Camera

Hold the camera firmly against your cheek as shown for vertical and horizontal pictures, and press the shutter release a few times.



A gentle squeeze is all that is needed to release the shutter. By pressing the shutter release slowly and gently, you can prevent the camera from jumping as you take the picture.

## SELECTING THE FILM

At present, you have a choice of two film types to use in your Highlander Land Camera; either the Type 37 Polaroid 3000 Speed Land Picture Roll, or the Type 32 Polaroid PolaPan 400 Land Picture Roll.

Type 37 is the high speed film, designed to make pictures indoors without flashbulbs, but useful for outdoor pictures, too. For indoor pictures at night, it should be used with the repeating wink-light (see page 14) to fill in shadows. Outdoors in bright daylight, you will usually need to place a 4-Stop Filter, furnished with the wink-light, over the lens to prevent overexposure (see page 8).

Type 32 is an all-purpose film with an ASA equivalent daylight speed of 400. It is somewhat lower in price than the 3000 speed film, and produces pictures every bit as sharp and clear, outdoors and indoors. When used indoors, it requires the use of flashbulbs.

In every Polaroid Land Picture Roll box you will find three items: the Print Coater, the Picture Tips (with a copy order blank), and the packaged film.

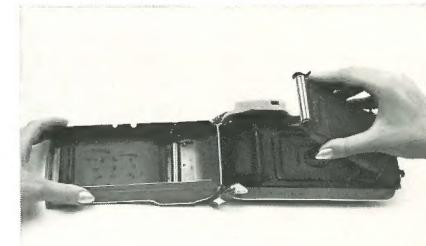
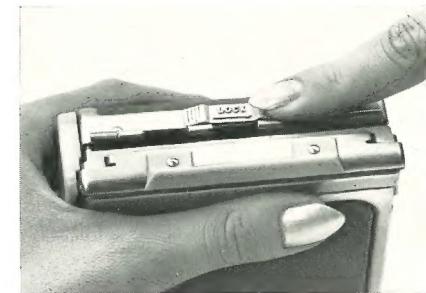
Avoid opening the film or loading the camera in direct sunlight, because you may fog the film. Find some shade, or if none is available, turn your back to the sun and shield the film with your body.

When you open the film package, tear the end off carefully, so that you don't squeeze the package.



## LOADING THE CAMERA

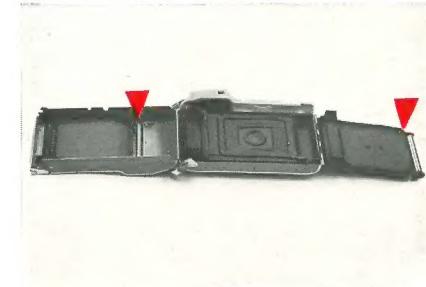
Hold the camera as shown and slide the latch to the unlock position.



Set the camera down on a flat surface and lift open the back cover and lay it flat.

Then lift up the inner panel and lay it flat. This is the position in which the camera is loaded.

Before loading, examine the rollers (arrows). The two steel rollers are the heart of 60-second photography. The picture roll papers pass between these rollers, which squeeze the developer reagent evenly between the positive and negative sheets. **It is important to keep these rollers clean.** Use a damp cloth to remove any specks or deposits that may appear on the rollers as the camera is used.



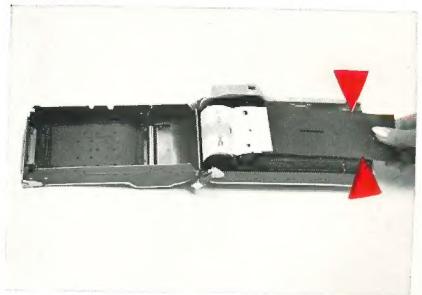
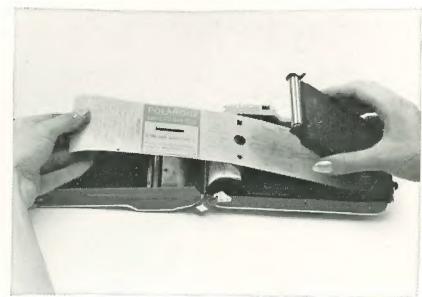
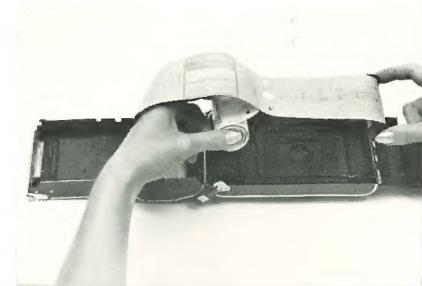
The film actually contains two rolls: a large white (positive) roll and a spooled (negative) roll. When you unwrap the film, be careful not to break the Scotch Brand Tape seals on the top of the spooled roll and the underside of the large roll.

Drop the rolls into the wells on either side of the bellows, as shown.

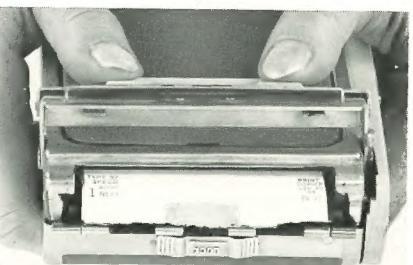
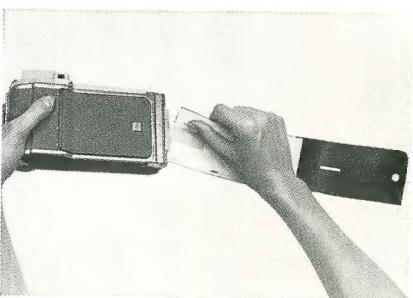
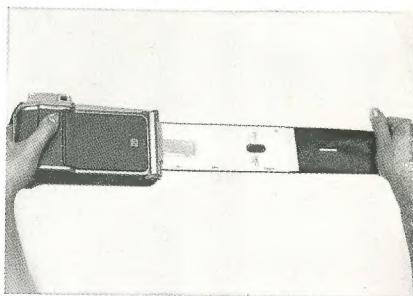
Now close the inner panel, folding the film leader over the steel roller on the edge of the inner panel.

Lay the leader flat between the guides (arrows) at the outer edge of the panel.

Then close the back cover.



Squeeze it tightly shut, and slide the latch to the lock position. There will be a short tab of black paper extending beyond the cutter bar.



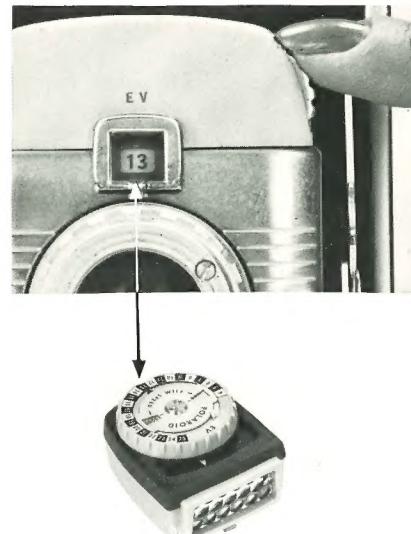
The camera is now ready for the first picture. You can always tell what picture is ready to be taken by lifting the cutter bar and looking at the tab beneath it.

## SETTING THE SHUTTER

For each scene there is an exact amount of light which must be let in through the camera lens to record a clear image upon the film in your camera.

On page 3 you saw how the single exposure dial adjusts both shutter speed and lens opening, controlling the amount of light let in.

The best way to decide how much exposure (what "EV" number) each scene needs is by using the Polaroid Model 625 Exposure Meter. This ultra-sensitive meter gives accurate readings in any situation, from indoor scenes in the daytime to bright beach or snow scenes. You can read the correct shutter setting directly from the meter. (As example, if meter reads 13, set 13 on camera.)



If you do not have the exposure meter, use the table contained in the Picture Tips packed with the film.

Turn the shutter dial to the EV number you have selected. **Always turn the dial to an exact number—never between numbers.** You can feel it click in place.

When using 3000 speed film outdoors, if the meter calls for a setting of EV 19 or higher (as it will in bright scenes), place the 4-S Filter (furnished with the wink-light) over the camera lens. Set your meter to the **200 speed scale** and use the EV number the meter now shows. If you do not own a meter, follow the instructions in the Picture Tips.

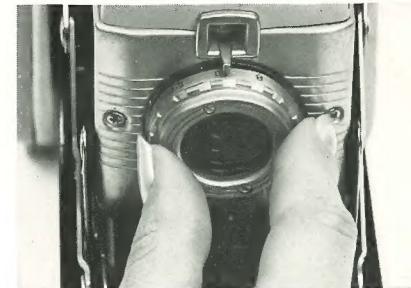


## FOCUSING THE LENS

Turn the focusing turret to the correct distance between the lens and your subject. To obtain sharp pictures, estimate as accurately as possible, especially at distances less than 6 feet.

### TIME KNOB

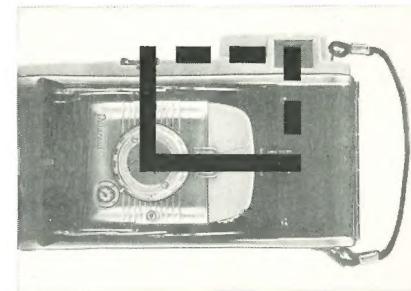
Be sure the I-B knob is set at "I" (for Instantaneous) for **all** pictures except time exposures (see page 15).



## USING THE VIEWFINDER

For pictures at  $3\frac{1}{2}$  to 6 feet distance, you must correct "parallax." This "parallax" correction is needed to offset the difference in location of the camera lens and viewfinder lens, as shown by the picture at right.

Your viewfinder has a small square in the corner which will help you aim the camera properly (correct parallax) for close-up pictures. To use it, imagine two lines extending from the edges of the square (dotted lines in the picture at right) and frame your subject within these lines. This is particularly important at  $3\frac{1}{2}$ -4 feet, and grows less important as you move away. Beyond 7 or 8 feet, use the entire viewfinder to frame your subject.



## TAKING THE PICTURE

Hold the camera firmly against your cheek and squeeze the shutter release. (Remember, don't punch it — you will jar the camera and get a fuzzy picture.)

You have now taken the picture. **It will not start developing until you pull the tab.** (Some people have been known to snap the picture, wait a minute, then pull the tab and immediately remove the print—a very faint, underdeveloped one.)



## DEVELOPING THE PICTURE

**Shield the camera from direct sunlight when you pull the tab.**

Hold the camera as shown, your left hand under the strap. (It is not necessary to close the front of the camera to develop a picture.) Throw the red lever in either direction to release film, using left thumb or right hand, whichever is more convenient.

Open the latching cutter bar by lifting the plastic edge, and take a firm grip on the paper tab. You'll find that the best grip to use is along the length of the forefinger and thumb, as shown.

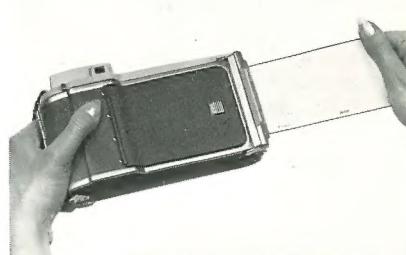
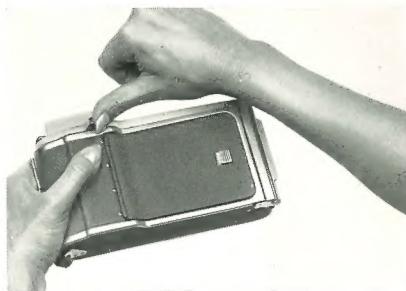
Pull the tab straight out with a single motion. Pull it about as hard and rapidly as you might pull down a window shade; not hard enough to pull the shade off the roller (or the film off the spool), but not slowly and hesitantly either. **Remember, the film will stop automatically.**

**Note:** If the tab will not pull easily, throw the lever again. If you throw the lever accidentally at any time, don't worry — no harm is done.

After you pull the tab, press down and latch the cutter bar, and tear off and discard the excess paper.

## WAIT ONE MINUTE

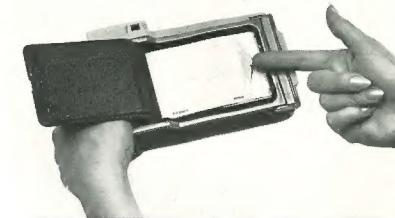
Pulling the tab has started the developing process — and advanced the film into position for the next picture. (You can take the next picture while the first one is developing, but we don't recommend this unless you're the kind of person who doesn't confuse easily.)



## ONE MINUTE LATER

After pulling the tab, the picture should be developed for about 60 seconds. In cold weather (45°F or below) double the development time. You may wish to check yourself with a watch or use the Model 120 Polaroid Development Timer.

When the time is up, slide back the latch on the print door.



Open the door, and lift the print out carefully, starting with the cut-out. Don't let the print fall back on the damp negative. Then close and **relatch** the print door.

## COATING THE PRINT

**Coat each print as soon after removal from the camera as possible.** If you coat your print properly, it will last as long as any fine print. First remove the curl by drawing the print face up over a straight edge, such as the edge of the camera, as shown.

Apply the Print Coater along the entire length of the print, including edges, borders and corners, with 6 or 8 firm overlapping strokes. For the last two or three pictures in each roll, press the coater against the print tab hard for a moment to release extra liquid.

**Note:** If a clean, flat coating surface is not available, store the prints in the folded film box until you get home. If you have the Model 383 Polaroid Deluxe Fitted Case, use the coating platform to coat your prints on the spot.

## CORRECTING PICTURES

Here is how to spot some common errors and how to correct them:

**Too Dark:** The picture is under-exposed. Set the camera to a lower shutter number.



**Too Light:** The picture is over-exposed. Set the camera to a higher shutter number.



**Everything Blurred:** The camera moved. Be sure to hold the camera securely, and do not punch the shutter release — squeeze it slowly. Try holding your breath when you press the shutter release.



**Subject Blurred:** The subject moved as the picture was taken.



**Subject Fuzzy:** When another part of the picture is sharp while the subject is fuzzy, the camera is out of focus. Be sure the lens is set for the exact distance to the subject.



**White Areas:** Light struck the negative roll during loading. Do not load in direct sunlight. Do not break the seals on the positive and negative rolls when loading.



**Streaks at Print Edge:** The tab slot was not shielded from the sun while the tab was being pulled. When taking pictures outdoors, turn your back to the sun when you pull the tab, so that your shadow covers the camera.



**Streaks Across Print:** The tab was pulled unevenly. Do not stop or hesitate while pulling the tab. Pull the tab fairly rapidly until the film stops automatically.



**Spots on Print:** Evenly-spaced spots on the picture are caused by foreign matter adhering to the steel rollers. Keep the rollers clean (see page 16).



**Dull or Faint Picture:** The picture is underdeveloped. Check the Picture Tips for developing times under various conditions. Usually, you will want to wait one full minute after pulling the tab.



## TAKING INDOOR PICTURES

At least half the fun of owning a Polaroid Land Camera is in taking indoor pictures of family and friends. The 3000 speed film makes this kind of picture-taking as easy as snapping pictures in sunshine. With it, you can take many fine daytime pictures by just the light from a window (as example, the picture of the boy blowing bubbles). Use the Model 625 Meter or the Picture Tips for exposure settings.

**Wink-Light Pictures:** The repeating wink-light is the key to taking consistently good indoor pictures without flashbulbs. Its gentle wink of light erases shadows, as in the picture at right. You probably have obtained a wink-light with your Highlander Camera. Spend a few minutes reading the excellent instruction booklet included with it.

If you do not have the wink-light, you may wish to experiment in taking 3000 speed film pictures with available light. You are apt to get strong shadows in your picture from the uneven room lighting as shown at right. Use the film as a sort of exposure meter, by taking test pictures and then correcting errors in exposure on succeeding pictures. Or you can use the special 3000 speed tungsten guide mark on the Model 625 Meter.

**Auxiliary Flasher:** The auxiliary flasher, which comes with the wink-light, lets you use tiny AG-1 flashbulbs in situations where room lighting is so dim, or distance to the subject so great, that the wink-light can't fill the lighting needs itself. Also, this flasher will let you take flash pictures indoors with the Type 32 (400 speed) film.



## TIME EXPOSURES

Your camera has a knob on the front of the shutter which can be set at "I" (for Instantaneous) or "B" (for Bulb, a holdover from the days when photographers squeezed a rubber bulb to open and close the shutter). When the knob is set to "B", the shutter will stay open as long as the shutter release is held down.

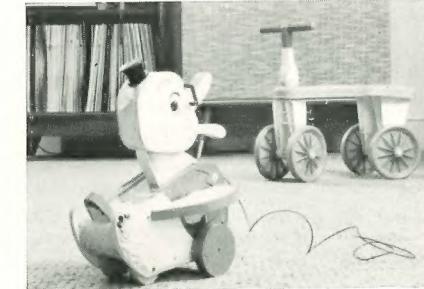
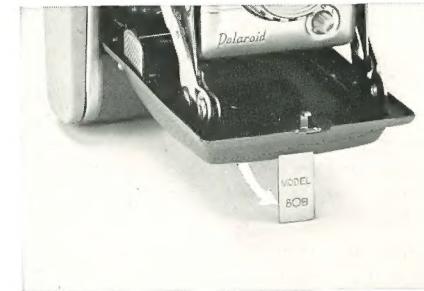
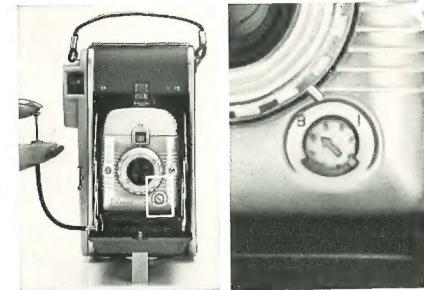
For any time exposure, the camera must be held rigidly. If you do not have a tripod, pull out the folding support on the front cover and stand the camera on a flat surface. Exposures must be arrived at by trial and error. If the picture is too dark, increase exposure time; if too light, decrease exposure time.

Time exposures can be used for situations like these:

(A) Pictures where light is too dim for snapshots, and where the wink-light or flasher is impractical or not available (long-distance outdoor scenes at night, as in the skyline scene, for instance).

(B) Pictures where maximum depth-of-field (sharpness of focus from foreground to background) is desired, and subject motion is not a problem. Note the uniform sharpness of the duck, the wagon, and the records in the cabinet. For this type of picture, set the shutter to EV 18, which gives the smallest lens opening, and use a long exposure.

Do not forget to reset the time knob to "I" when you are finished taking time exposure pictures.



## CARE OF THE CAMERA

**Rollers:** The two steel rollers must be kept clean and free of foreign matter which can cause evenly spaced spots along the length of the picture. Before loading each roll, turn the rollers slowly and remove foreign deposits with your fingernail or a moistened cloth.

**Plates:** Foreign matter may also collect on the black interior plates. Clean them carefully with a damp cloth.

**Keep the lens clean:** First blow off loose lint or dust particles, then polish gently with lens tissue or a soft, lint-free cloth.

## PRINT CARE

The Print Coater leaves a hard plastic coating on your print. If you bend or crease your pictures, or write on the back of the print, you can crack this coating, which can lead to discoloration along the cracks. Use the tab or back edges for notes.

As with any photograph, it is wise not to use paste or rubber cement to mount your pictures. Impurities in many adhesives may cause the pictures to discolor. Polaroid Land prints may be safely stored in a Polaroid Picture Album, or in albums which have separate transparent acetate pages.



## COPIES AND ENLARGEMENTS

You can make excellent on-the-spot copies of your Land prints (and often improve on them) with the Model 230 Polaroid Print Copier. Or you can get quick, inexpensive copies and enlargements from Polaroid Corporation. See the Picture Tips for copy order blanks and further details.